In the Claims:

Please amend Claims 1, 5, 8-15, 17, 18 and 20; and add new Claims 21-26, all as shown below. Applicant respectfully submits that the new Claims are fully supported by the Specification and that no new matter is being added.

1.      (Currently Amended)  A computer program product for execution by a server computer for performing resource pool size maintenance for an application server, comprising:

computer code for maintaining a pool of resources for the application server;

computer code for maintaining a first plurality of resources that have been determined to be at least one of not created successfully and not able to be refreshed, in an unavailable deque;

computer code for maintaining a second plurality of resources that have been determined to be available, in an available deque;

computer code for triggering a resource pool shrink check;

computer code for determining that pool shrinking is necessary;

computer code for reducing resources ~~that have been determined to be at least one of not created successfully and not able to be refreshed in an~~ in the unavailable deque; and

computer code for subsequently reducing resources ~~that have been determined to be available in an~~ in the available deque.

2.      (Original)  The computer program product of claim 1 wherein said computer code for triggering a resource pool shrink check includes:

computer code for determining that a period of time has expired; and

computer code for performing the resource pool shrink check at the expiration of the period of time.

3.      (Original) The computer program product of claim 2 wherein the period of time is set by a programmable attribute.

4.      (Previously Presented) The computer program product of claim 1 wherein said computer code for determining that pool shrinking is necessary includes:

computer code for detecting resources contained in the available deque or the unavailable deque.

5.      (Currently Amended) The computer program product of claim 1 wherein computer code for determining that pool shrinking is necessary includes:

computer code for determining that the number of resources in the resource pool is greater than a maximum resource pool threshold value.

6.      (Original) The computer program product of claim 5 wherein the maximum resource pool threshold value is set by a programmable attribute.

7.      (Original) The computer program product of claim 1 wherein computer code for reducing resources in an unavailable deque includes:

computer code for reducing resources in an unavailable deque to coincide with a maximum unavailable resources threshold.

8.      (Currently Amended)  The computer program product of claim 7 1 wherein the reduced resources in the unavailable deque are destroyed. reducing resources in the unavailable deque includes destroying the resources.

9.      (Currently Amended) The computer program product of claim 1 wherein computer code for reducing resources in an available deque includes:

computer code for reducing resources in an available deque to coincide with a

- 3 -

maximum ~~available resources~~ resource pool threshold value.

10.    (Currently Amended)  The computer program product of claim ~~9~~ 1 wherein ~~resources in the available deque are destroyed~~ the reducing resources in the available deque includes destroying the resources.

11.    (Currently Amended)  A computer program product for execution by a server computer for performing resource pool maintenance for an application server, comprising:
computer code for maintaining a pool of resources;
computer code for triggering a resource testing check ~~test~~ for the pool of resources;
computer code for determining that a test on pool resources is necessary;
computer code for determining whether at least one of the resources is functioning properly by performing ~~a~~ the test on pool resources; and
computer code for refreshing pool resources that have been determined to be not functioning properly based on the pool resources testing.

12.    (Currently Amended)  The computer program product of claim 11 wherein said computer code for triggering a ~~test~~ resource testing check for the pool of resources includes:
computer code for determining that a period of time has expired; and
computer code for performing the resource ~~pool shrink~~ testing check at the expiration of the period of time.

13.    (Currently Amended)  The computer program product of claim ~~11~~ 12 wherein the computer code for determining that a period of time has expired includes: ~~said computer code for determining whether at least one of the resources is functioning properly by performing a test on pool resources includes:~~

- 4 -

computer code for refreshing resources determined to not be functioning properly.

computer code for reading an attribute that determines the frequency of resource testing.

14.     (Currently Amended)  A computer program product for execution by a server computer for performing maintenance on connection pool deques in an application server, comprising:

computer code for maintaining an unavailable deque of resources that have been determined to be at least one of not created successfully and not able to be refreshed;

computer code for maintaining a reserved deque of resources that have been requested or are in use;

computer code for traversing an the unavailable deque of resources that have been determined to be at least one of not created successfully and not able to be refreshed and a the reserved deque of resources that are allocated;

computer code for performing maintenance on the unavailable deque; and

computer code for performing maintenance on the reserved deque.

15.     (Currently Amended)  The computer program product as claimed in claim 14 wherein said computer code for traversing an the unavailable and a the reserved deques includes:

computer code for determining what resources are available in the unavailable deque and the reserved deques deque.

16.     (Original)  The computer program product as claimed in claim 14 wherein said computer code for performing maintenance on the unavailable deque includes:

computer code for scheduling resource creation for each resource in the unavailable deque.

17.    (Currently Amended)  The computer program product as claimed in claim 14 wherein said computer code for performing maintenance on the reserved deque includes:

~~computer code for scheduling resource creation for each resource in the reserved deque.~~

computer code for determining whether a resource in the reserved deque has been used since the last time maintenance was performed on the reserved deque;

computer code for moving the resource to the available deque upon the determination that the resource was not used since the last time maintenance was performed.

18.    (Currently Amended)  A computer program product for execution by a server computer for performing resource creation in a connection pool in an application server, comprising:

computer code for generating a resource in the connection pool;

computer code for determining ~~that~~ whether the resource was created successfully in the connection pool; and

computer code for moving the resource to an available deque when successful generation of the resource is confirmed, otherwise moving the resource to an unavailable deque for tracking resources that are not created successfully.

19.    (Original)  The computer program product of claim 18 further comprising:

computer code for determining that a period of time has expired; and

computer code for generating a resource at the expiration of the period of time.

20.    (Currently Amended)  A computer program product for performing resource pool maintenance, comprising:

computer code for maintaining a pool of resources;

computer code for maintaining an unavailable deque of resources that have been

- 6 -

determined to be at least one of not created successfully and not able to be refreshed;

computer code for maintaining an available deque of resources that have been determined to be available;

computer code for determining that pool shrinking is necessary;

computer code for removing unavailable resources that have been determined to be at least one of not created successfully and not able to be refreshed from an unavailable deque of a resource pool; and

computer code for removing available resources from an available deque of the resource pool.

21.     (New) The computer program product of claim 16 wherein the computer code for scheduling resource creation for each resource in the unavailable deque includes:

computer code for scheduling a resource retry task.

22.     (New) The computer program product of claim 21 wherein the computer code for scheduling a resource retry task includes:

computer code for generating a resource in the connection pool;

computer code for determining whether the resource was created successfully in the connection pool;

computer code for moving the resource to an available deque and cancelling the resource retry task when successful generation of the resource is confirmed; and

computer code for moving the resource to an unavailable deque for tracking resources that are not created successfully and retrying the step of generating a resource in the connection pool, upon unsuccessful generation of the resource.

23.     (New) The computer program product of claim 22 wherein a periodicity of the resource retry task is determined by reading an attribute that is configured by an application or a resource pool object.

24. (New) The computer program product of claim 16 wherein the computer code for scheduling resource creation for each resource in the unavailable deque includes:

    computer code for determining that a period of time has expired; and

    computer code for generating a resource at the expiration of the period of time.

25. (New) The computer program product of claim 17 further comprising:

    computer code for determining that a period of time has expired; and

    computer code for performing maintenance on the reserved deque at the expiration of the period of time.

26. (New) The computer program product of claim 25 wherein the period of time is an attribute configured by an application or a resource pool object.